AMENDMENTS TO THE CLAIMS

Claim 1 (Previously Presented) An automatic document generation system in an e-business environment, comprising:

a document generation rule formulator that a user employs to designate document generation rules through a graphic user interface, the document generation rules including assembly rules and context rules;

a document component library for storing and managing document component summary information and document components that represent specific concepts;

a component assembler for processing the assembly rules and assembling said document components from the document component library;

a context processor for processing the context rules and creating a grammar neutral document object from the assembled document components,

the component assembler and the context processor making up a document generation rule processor; and

a document grammar connector for converting the grammar neutral document object, which is suitable for program processing in a computer system, into a grammar-connected document that is in a human-readable string form for use in an actual business.

Claim 2 (Previously Presented) The system of claim 1, wherein the document generation rule formulator comprises:

a component selector for displaying usable component items that are provided by a corresponding library based on document component summary information searched in the document component library, the document component summary information including at least a component ID, a component name, and a component type, and optionally including various different types of information that represent other components;

a document component assembler for forming an area where component structures are modeled based on user input through said graphic user interface, the user dragging the needed document components appearing in the component selector and dropping the documents at a

suitable location in the document component assembler to thereby generate document structures, in which such structures are formulated as said assembly rules, and the assembly rules include IDs of all document components and structural information between each component; and

a context condition compiler for forming an area where context conditions realized through pairs of conditions and actions are compiled to enable insertion into document structures, the context condition compiler enabling the formation of context rules, which allow the processing of actions, in the document generation rule processor in the case where conditions are satisfied for a specific business context during document assembly.

Claim 3 (Original) The system of claim 2, wherein the assembly rules and the context rules are output as a single document generation rule.

Claim 4 (Currently Amended) The system of claim 1, wherein the document component library comprises:

the document component summary information for recording the document components that constitute business documents and detailed information on all components included in a present library; and

a component library interface for connection to external modules,

wherein the document generation rule formulator searches the document component summary information through the component library interface, and the document generation rule processor uses document component IDs, which are numbers specific to each component, to accumulate the document components required for document assembly.

Claim 5 (Original) The system of claim 4, wherein the document components stored in the document component library include simple components of a single type and complex components realized through a structure of a plurality of simple components.

Claim 6 (Previously Presented) The system of claim 1, wherein:

the component assembler is to read the assembly rules in the document generation rules, and use document component IDs to accumulate from the document component library the document components required in the assembly rules, then assemble the document components using structural information between components, after which the resulting assembled components are output; and

the context processor is to read the context rules in the document generation rules, and, if a specific business context satisfies the conditions of the context rules, apply designated actions to the assembled components to thereby ultimately generate the grammar neutral document object.

Claim 7 (Previously Presented) The system of claim 1, wherein the document grammar connector comprises:

a grammar converter supporting grammar for supporting specific business systems, and converting the grammar neutral document object into grammar-connected document objects; and

a document output unit for realizing and storing grammar-connected documents, which are used in an actual business and are in the form of a string recognizable by a user.

Claim 8 (Previously Presented) An automatic document generation method in an e-business environment, comprising:

(a) storing document component summary information and document components that represent specific concepts;

(b) designating document generation rules through a graphic user interface, the document generation rules to include assembly rules and context rules;

(c) accumulating document components needed for document assembly from a document component library according to the assembly rules, and generating grammar neutral document objects based on the context rules; and

(d) converting the grammar neutral document objects, which are suitable for processing in a program of a computer system, into grammar-connected documents in a human-readable string form used in an actual business.

Claim 9 (Previously Presented) The method of claim 8, wherein (b) comprises:

displaying a list of usable components provided by a corresponding library based on the document component summary information searched in the document component library;

dragging required documents appearing in a component selector and dropping the documents at a suitable location in a document component assembler, which forms an area where component structures are modeled based on user input through the graphic user interface, to thereby generate document structures; and

compiling context conditions realized through pairs of conditions and actions, and allowing insertion of the context conditions into document structures.

Claim 10 (Previously Presented) The method of claim 8, wherein (c) comprises:

reading the assembly rules in the document generation rules, accumulating from the document component library the document components required in the assembly rules using document component IDs, assembling the document components using structural information between components, and outputting the resulting assembled components; and

reading the context rules in the document generation rules, and if a specific business context satisfies the conditions of the context rules, applying designated actions to the assembled components to thereby ultimately generate the grammar neutral document objects.

Claim 11 (Original) The method of claim 8, wherein (d) comprises:

supporting grammar for specific business systems and converting the grammar neutral document objects into grammar-connected document objects; and

realizing and storing grammar-connected documents, which are used in an actual business and are in the form of a string recognizable by a user.

Claim 12 (Previously Presented) A computer-readable recording media storing instructions to cause a programmable processor to perform an e-business document generation method, comprising:

storing document component summary information and document components that represent specific concepts;

designating document generation rules through a graphic user interface, the document generation rules to include assembly rules and context rules;

accumulating document components needed for document assembly from a document component library according to the assembly rules, and generating grammar neutral document objects from the accumulated document components based on the context rules; and

converting the grammar neutral document objects, which are suitable for processing in a program of a computer system, into grammar-connected documents in a human-readable string form used in an actual business.

Claim 13 (Previously Presented) The computer-readable recording media of claim 12 wherein the grammar neutral document objects are Extensible Markup Language ("XML") documents.

Claim 14 (Previously Presented) The system of claim 1 wherein the grammar-neutral document object is an Extensible Markup Language ("XML") document.

Claim 15 (Previously Presented) The method of claim 8 wherein the grammar neutral document objects are Extensible Markup Language ("XML") documents.